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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/967,269 | 09/28/2001 | Matthew G. Kistner | 97-064B | 7326 |
| 7590 | 11/19/2003 | | EXAMINER | |
| John C. Hammar The Boeing Company PO BOX 3707, MC 13-08 Seattle, WA 98124-2707 | | | KENNY, STEPHEN | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3726 | |

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|---|-----------------|----------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/967,269 | KISTNER ET AL. |
| Period for Reply | Examiner | Art Unit |
| | Stephen J Kenny | 3726 |
| <i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i> | | |
| <p>A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.</p> <ul style="list-style-type: none"> - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | |
| Status | | |
| <p>1)<input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>15 October 2003</u>.</p> <p>2a)<input checked="" type="checkbox"/> This action is FINAL. 2b)<input type="checkbox"/> This action is non-final.</p> <p>3)<input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i>, 1935 C.D. 11, 453 O.G. 213.</p> | | |
| Disposition of Claims | | |
| <p>4)<input checked="" type="checkbox"/> Claim(s) <u>1-9</u> is/are pending in the application.</p> <p>4a) Of the above claim(s) <u>2,3 and 5</u> is/are withdrawn from consideration.</p> <p>5)<input type="checkbox"/> Claim(s) _____ is/are allowed.</p> <p>6)<input checked="" type="checkbox"/> Claim(s) <u>1,4 and 6-9</u> is/are rejected.</p> <p>7)<input type="checkbox"/> Claim(s) _____ is/are objected to.</p> <p>8)<input type="checkbox"/> Claim(s) _____ are subject to restriction and/or election requirement.</p> | | |
| Application Papers | | |
| <p>9)<input checked="" type="checkbox"/> The specification is objected to by the Examiner.</p> <p>10)<input checked="" type="checkbox"/> The drawing(s) filed on <u>9/28/01</u> is/are: a)<input type="checkbox"/> accepted or b)<input checked="" type="checkbox"/> objected to by the Examiner.</p> <p style="margin-left: 20px;">Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).</p> <p style="margin-left: 20px;">Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).</p> <p>11)<input type="checkbox"/> The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.</p> | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | |
| <p>12)<input type="checkbox"/> Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</p> <p>a)<input type="checkbox"/> All b)<input type="checkbox"/> Some * c)<input type="checkbox"/> None of:</p> <p style="margin-left: 20px;">1.<input type="checkbox"/> Certified copies of the priority documents have been received.</p> <p style="margin-left: 20px;">2.<input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____.</p> <p style="margin-left: 20px;">3.<input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</p> <p style="margin-left: 20px;">* See the attached detailed Office action for a list of the certified copies not received.</p> | | |
| <p>13)<input checked="" type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.</p> <p>a)<input type="checkbox"/> The translation of the foreign language provisional application has been received.</p> | | |
| <p>14)<input checked="" type="checkbox"/> Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.</p> | | |
| Attachment(s) | | |
| <p>1)<input type="checkbox"/> Notice of References Cited (PTO-892) 4)<input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .</p> <p>2)<input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 5)<input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>3)<input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . 6)<input type="checkbox"/> Other: _____ .</p> | | |

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: The drawings do not illustrate any of the numerals disclosed in the specification (e.g. core sheets 12 & 14, adhesive film 18 & 20, etc.). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

The attempt to incorporate subject matter into this application by reference to U.S. Patent documents listed on pages 3 & 5 is improper because merely citing the documents without explicitly stating the subject matter which is pertinent to the claimed invention is insufficient.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsen et al. (US Patent No 6040563).

Regarding claims 1 & 4, Matsen discloses a method for superplastically making an adhesively bonded, via a polymer film (column 10, lines 26 & 37), multisheet sandwich panel comprising: assembling a plurality of metal sheets having a high temperature adhesive affixed to one or more sheet at selected locations corresponding to the location of adhesive bonds in the finished part (column 5, lines 34-37 & Figure 5); loading the stack into a press (column 9, lines 17-27); heating the pack to the superplastic forming range without destroying the adhesive (column 5, lines 34-37); superplastically forming the pack to define a selected core geometry for the finished part and to define the adhesive bonds while concurrently flowing the adhesive (column 7, lines 65+); cooling the formed pack below the superplastic range to a temperature where the adhesive sets to complete the finished part (column 9, lines 62+); and removing the cooled finished part from the press (column 10, lines 1-5).

Regarding claim 7, Matsen discloses that the adhesive is a polyimide (column 10, line 26).

Regarding claims 8 & 9, Matsen discloses that forming occurs at a temperature below 425 degrees Celsius, i.e. 375°C (column 10, line 48).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsen ion view of Applicant's Admitted Prior Art (AAPA).

Matsen discloses the claimed invention as discussed above except for explicitly stating that the metal sheets are A1 2004, A1 8090, or A1 1570. Note, Matsen does explicitly disclose that the adhesive is a polyimide (column 10, line 26).

AAPA discloses that A1 2004, A1 8090, or A1 1570 are commercially available, and widely known Aluminum alloys (page 10, paragraph 0028). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to superplastically form a component as disclosed by Matsen wherein the sheets are A1 2004, A1 8090, or A1 1570 as taught by AAPA in order to realize the well-known favorable weight & thermal characteristics of these alloys.

This application contains claims 2, 3, 5 drawn to an invention nonelected with traverse in Paper No. 4. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Response to Arguments

Applicant's arguments filed 10/15/03 have been fully considered but they are not persuasive. Regarding the applicant's traversal of the restriction requirement, the mere allegation that the restriction is improper is not considered responsive, and therefore the restriction is made final.

Applicant has put for the argument that Matsen does not disclose a polymer adhesive film. The examiner directs the applicant's attention to column 10 line 26 where Matsen

explicitly discloses that the adhesive agent comprises a polyimide which is a polymer; furthermore in column 10, line 37 Matsen discloses that the adhesive agent is a film (306). Therefore Matsen does in fact expressly disclose all of the claimed limitations.

In regards to applicant's arguments towards the U.S.C. 103(a) rejection of claim 6, the specific alloys claimed are commercially available and therefore not part of the applicant's invention. Furthermore, it would have been obvious to one of ordinary skill in the art to employ such alloys given that these are known alloys, with known characteristics (i.e. weight, thermal coefficient of expansion, tensile strength, etc.) so an artisan of ordinary skill would choose a given alloy depending on the application it is to serve.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

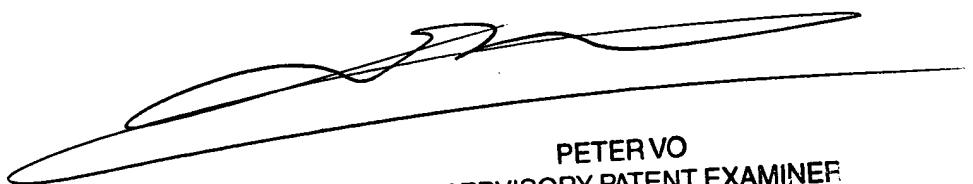
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen J Kenny whose telephone number is 703-306-0359. The examiner can normally be reached on mon - fri 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9302.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

sk SK

11/18/03



PETER VO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700